PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

March 24, 1897.—Dr. Henry Hicks, F.R.S., President, in the Chair.

The following communications were read:—

1. 'On the Association of Sigillaria and Glossopteris in South Africa.' By A. C. Seward, Esq., M.A., F.G.S., University Lecturer in Botany, Cambridge.

In this paper the Author describes in detail several specimens of fossil plants submitted to him by Mr. David Draper of Johannesburg. His conclusions as to the geological age of the plant-bearing beds differ from those arrived at by Mr. Draper from stratigraphical evidence; the plants point to an horizon which may be referred to what is now termed the Permo-Carboniferous age. The difficulty of distinguishing between various forms of Glossopteris-leaves is discussed at some length; and the opinion expressed that it is practically impossible to separate the Indian, Australian, and African forms of G. Browniana, G. indica, and others. The chief interest as regards the plants centres round the specimens of Sigillaria; these are fairly well preserved impressions, and are referred to the well-known species, S. Brardi. In addition to various forms of the genus Glossopteris and the specimens of Sigillaria, the following plants are recorded:-Noeggerathiopsis Histopi, Gangamopteris cyclopteroides, Phyllotheca, Conites sp., Cardiocarpus sp., and Sphenopteris sp.

The paper concludes with some general remarks on botanical provinces in the Northern and Southern Hemispheres, and the relation of the Glossopteris-flora to the Coal-Measure vegetation

of Europe.

2. 'Notes on the Occurrence of Sigillaria, Glossopteris, and other Plant-remains in the Triassic Rocks of South Africa.' By David Draper, Esq., F.G.S.

The Author gives a brief description of the geology of four localities, within a comparatively short distance from Johannesburg, from which several fossil plants have recently been obtained. He considers the plant-bearing beds to belong to the Lower Stormberg Series of Dunn, and to the horizon known as the Molteno Beds. The most important locality described in these notes is that of Vereeniging, 30 miles south of Johannesburg, where the Author found several specimens of Sigillaria associated with Glossopteris and other plants in iron-stained sandstones. The significance of this discovery of Sigillaria is briefly discussed. The several species of plants have been described by Mr. A. C. Seward in a paper recently sent to the Society.